

Square Insert 1-Sided 16 x 17.5 x 2

A08-010

The Insert is produced from a rough blank. All the sides are ground to size oscillating a 12A2 wheel keeping the coating permanently in contact. Infeed per oscillation is 0.01 mm. The profile is ground in 2 passes, one pregrinding and a finishing pass with 2 different wheels.



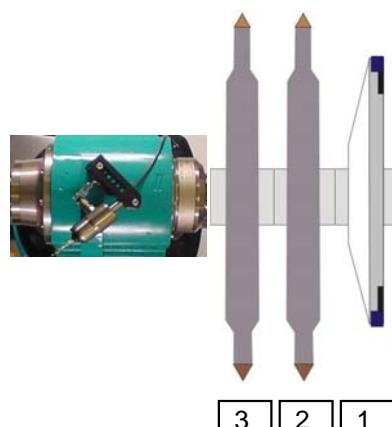
1. Cycletime for Production

Workpiece:	Blank 16 x 17.8 x 2 mm, TTC Clamping, Clearance 35° Material CARBIDE							
Operations	Probe	side 1	side 2	side-3	chamfer	Profile pregr.	Profile fin.	Load
Feed [mm/Min]	2000	5000	5000	5000	5000	40	70	9000
Power [kW]		3	3	3	3	4	2	
Cutting feed [m/s]		20	20	20	20	20	22	
Used wheels		1	1	1	1	2	3	
Grinding time [s]	9	40	40	40	30	38	25	12
Total cycle time	3 Min 56							

The cycle times are indicative. Material to be ground, grinding wheels, coolants can influence the cycle times considerably.

2. Used Grinding Wheels

1	12C9 Ø250 D64
2	14V1 Ø300 D76
3	14V1 Ø300 D46



3. Machine and Software Requirements

Machines: 5 axes CNC grinders : SIRIUS HPM

Coolant: Synthetic Oil, pressure 6 bar

Control: Fanuc 31i

Software: Quinto 5

Accessories: Robot

Responsible engineer: OP. 1.5.11

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